Reply to Office Action of March 22, 2006

<u>REMARKS</u>

After entry of this amendment, claims 1-30 are pending. Claims 4, 5, 13 and 14 have been amended without prejudice or disclaimer. Support is found *inter alia* in the original claims. Claims 27-30 have been added and find support in original claims 4, 5, 13 and 14. No new matter has been added. It is believed that new claims 27 and 28 correspond to Group I and new claims 29 and 30 correspond to Group II.

In response to the restriction requirement set forth in the Office Action mailed March 22, 2006, Applicants respectfully traverse and urge reconsideration and withdrawal of the restriction requirement for the following reasons.

Restriction Is Inappropriate When All Claims Are Related and Not Independent.

The Examiner has required restriction between Groups I to XX. The Examiner has stated that claim 1 links Groups I-VI, that claim 11 links Groups VII-XIV, and that claim 21 links Groups XV-XIX.

The Commissioner may require restriction if two or more independent and distinct inventions are claimed in a single application (35 U.S.C. § 121). In the present case, although some of the claimed subject matter may be classified in different classes, the inventions are not independent. According to the MPEP § 802.01, independent "means that there is no disclosed relationship between the two or more inventions claimed." Yet all of Applicants' claims are related to a recombination system for eliminating DNA sequences from the chromosomal DNA of eukaryotic cells by inserting into the chromosomal DNA a sequence with a recognition sequence for the site-directed induction of DNA double-strand breaks. Specifically, all the claims, including all the linking claims, either depend directly or indirectly from the recombinant system of claim 1 or include all the limitations of claim 1, such as claim 11 and its dependent claims. Thus, the claims are not independent, but rather all share a common system.

The Examiner relies only on the argument that the inventions are distinct to support a restriction requirement. Yet the statute clearly requires that restriction is allowed only when "two or more independent **and** distinct inventions are claimed." 35 U.S.C. § 121 (emphasis

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added). Applicants understand that the Patent Office has interpreted section 121 of the patent code as allowing restriction when <u>either</u> the inventions are independent <u>or</u> distinct (MPEP § 803), but believes this interpretation is not well founded. Thus, Applicants respectfully submit that the restriction is improper without a showing by the Patent Office that the inventions are independent.

Restriction to Only Claims Reciting One Element or One Enzyme is Inappropriate Where Enzymes are Known and Claims Are Directed To Methods.

The Examiner has stated that the constructs comprised by the products of Groups I-VI comprise elements and enzymes that differ from each other in both structure and specific activity and that these products differ from the products of Groups XV-XIX. The Examiner has required the Applicants to further select a single element if Groups I, II, VII, IX and X are elected; to further select a single enzyme if Groups III, IV, V, VI, XI, XII and XIV; and to further select a single product if Group XX is elected. Applicants disagree with these requirements and request reconsideration and withdrawal.

Applicants' invention is directed to the recombination system which provides for a predictable elimination of defined nucleic acid sequences by site-directed induction of DNA double-strand breaks. This system can be used with one or more of the many elements recited in claim 4 or one or more of the enzymes recited in claim 7. Applicants are not trying to patent these elements or enzymes themselves, but rather a method of using them in the novel recombination system in eukaryotic organisms. The recited elements and enzymes are simply representative enzymes with the necessary function or representative elements that can be used in the method of the present invention.

To limit the present application to claims directed to use of only one enzyme or only one element would unduly restrict the application to one very narrow invention and require an undue multiplicity of applications to be filed to cover use of other enzymes and elements in the same recombinant system. Applicants do not believe that searching the sequences or function of the enzymes is required to examine this application. Moreover, Applicants do not believe that searching the elements is required to examine this application, since these are known and are

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merely an additional known component to the inventive systems and methods of this application.

Should the Examiner disagree, Applicants hereby provisionally elect with traverse Group I (claims 2-4) and the element selection markers.

All Groups Can Be Searched And Examined Without Undue Burden

Furthermore, Applicants believe that there is no undue burden on the Examiner to search all groups together. The claims all share a common technical feature in the recombination system which provides an efficient method for the site-directed induction of DNA double-strand breaks. The same art relevant to the recombinant system would be relevant to the process of using it.

For example, many of the groups share the same class and subclass, as outlined by the Examiner on pages 2 and 3 of the Office Action. Thus a search of the shared classification would be applicable to a number of groups. For at least the groups with shared classifications, there would be no undue burden for the Examiner to consider those groups together.

Conclusion

For at least the above reasons, Applicants respectfully request that the restriction requirement be reconsidered and withdrawn.

This response is filed within the one month period for response from the mailing of the Office Communication, to and including April 24, 2006 pursuant to 37 CFR § 1.7(a).

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A fee sheet authorizing payment for the new claims is enclosed. No further fee is believed due. However, if a fee is due, please charge our Deposit Account No. 03-2775, under Order No. 13173-00010-US from which the undersigned is authorized to draw.

Respectfully submitted,

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